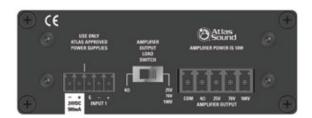




TSD-PA10VG Mono 10W Power Amplifier









Description

The Atlas Sound TSD-PA10VG is a single channel global amplifier that can deliver up to 10W into a 4Ω, 8Ω, 25V, 70V, or 100V speaker load with a balanced mono phoenix style input. The Atlas PA10VG only draws 2.8W when in idle and is over 70% efficient to meet most energy power consumption standards. The front panel has an input level control as well as power, signal, and peak LED indicators. The suggested TSD external power supplies are wide range AC types and will work from 100-240VAC to accommodate global power systems.

The TSD-PA10VG is part of a full line of Atlas Sound Time Saving Devices. These compact (1.5" x 4" x 2.75") units are designed to solve some of the common audio system problems in the easiest, most efficient, and cost-effective way. All models are made from high quality components and include removable individual I/O connectors for quick and precise wiring, separate ground terminals for all I/Os assuring secured connections, and removable level controls that can be replaced with tamper-resistant security covers. The TSDs are highly efficient and meet most energy standards as one 24V DC power supply (available separately) can power multiple Atlas Time Saving Devices.

Features

- 10W into 4Ω
- 5W into 8Ω
- 10W Into 25v/70v/100v Loads
- · One (1) Balanced Input
- · Removable Level Control with Set-It-And-Forget-It Security Cover
- · Peak Indicator
- · Input Signal Indicator
- · Cable Management System
- Multiple Mounting Configurations
- Separate Ground Connections
- Removable Phoenix Style I/O Connectors
- Meets Most Energy Standards
- · Compact Chassis Design

Audio Applications

- Projector Amplifier
- Zone Amplifier
- Rear Channel Amplifier

Installation

- Courtroom
- **Public Forums**
- Churches
- Restaurants
- Schools
- Industrial Facilities
- · House of Worship



Owner's Manual

TSD-PA10VG Mono Commercial Power Amplifier



Front Panel Description



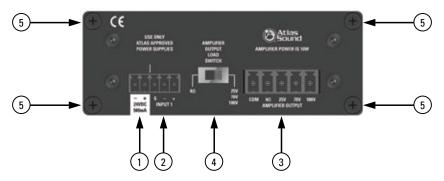
- Input Level Control Determines the output level at the loudspeakers on the PA10VG. Turn
 clockwise to increase the signal level and counter-clockwise to decrease the level. Note: The
 Input Level Control knob can be removed and replaced with a supplied security cover to prevent
 unauthorized adjustment.
- 2. Power LED Illuminates Blue when 24VDC power is present.
- Signal LED Illuminates Green when the input signal strength reaches 25mV to verify a signal path.
- 4. Peak LED Illuminates Red when the input signal reaches 3dBV below when signal clipping will occur. Occasional flashing is normal but if this indicator is continuously On, then reduce the input level using the input level control on the front panel.
- Bracket Retainer Points Each TSD includes two mounting brackets for securing the TSD to a cabinet or wall. Remove screws and align the bracket with the panel hole before firmly tightening the screws.



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Rear Panel Description



TSD Input/Output connections are removable for easy system wiring. The connectors have a 3.5mm pitch between pins.

- 1. DC Power Input Each TSD that requires DC power comes with a 2 position connector for an external 24VDC power supply (sold separately). Because of the TSDs low power consumption, a single external power supply may power more than one TSD. Please refer to the specifications on current requirements in milliamps to match with the appropriate power supply. Please observe the polarity of the wiring to this connector. Note: It is acceptable to exceed the current requirements of the TSDs but NOT safe to use a power supply that is below the current requirement of the device.
- Balanced Line Input Connect balanced line level signals to the phoenix style connectors. Your
 connection must be mated properly to the input connector or signal loss and/or noise may occur.
 Note: Unbalanced line level inputs can also be used by connecting the (G) and (-) terminals
 together.
- 3. **Speaker Outputs** Connect the loudspeaker wiring to these terminals, observing the polarity shown on the rear of the chassis. For low impedance loads, use the "COM" and 4Ω terminals. For high impedance loads, use "COM" and the proper terminal for your system (25/70/100V). It is recommended to keep the sum total of tapped loudspeakers to 10W.
- 4. **Output Load Switch** For 8Ω & 4Ω loads place the switch into the 4Ω position. For 25/70/100V speaker systems place the load switch into 25/70/100V position. Failure to do this may cause the amp to go into protect.
- Cable Management Retainer Points Use the rear panel screws for connecting the included cable retainers. Each TSD comes with two cable retainers for simplified cable management.



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Knob and Security Cover

All front panel level controls feature a removable knob that can be replaced with included security covers to prevent potentiometer damage or unwanted changes.

- Knob Installation Turn the potentiometer shaft fully counter-clockwise. Align the knob indicator
 to the lowest setting on the panel and the potentiometer shaft slot. Carefully press the knob onto
 the potentiometer shaft. Do not force or damage may occur to the potentiometer.
- Security Cover Installation Remove the knob from the panel and insert the cover. Do not force or damage may occur to the potentiometer. Small pliers may be required to remove the knobs.

Mounting

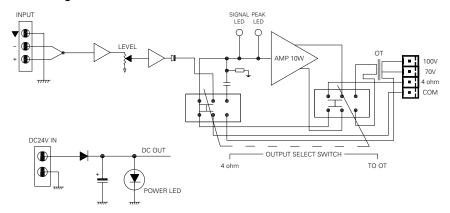
There are three ways to securely mount this TSD:

- Velcro[™] Each unit includes industrial-grade Velcro[™] with adhesive backing to adhere to any flat surface.
- 2. Brackets Each unit includes two mounting brackets to secure to a cabinet or wall.
- 3. Rack Mount Panel The optional TSD-RMK rack mount panel supports up to four TSDs in a 1RU space.



TSD-PA10VG Mono Commercial Power Amplifier

Block Diagram



Specifications

Description Mono Commercial Power Amplifier

Chassis Color Black
Chassis Material Aluminum

Power Output $5W @ 8\Omega$, $10W @ 4\Omega$, $10W @ 25V = 62\Omega$, $70V = 490\Omega$,

 $100V = 1000\Omega$ Loads

Inputs

Type Qty 1, Balanced Line

Connection Removable 3 Position Captive Screw 3.5mm Spacing

Impedance $10K\Omega$ Balanced, $5K\Omega$ Unbalanced

Line Input Level 500mV (-6dBV) Balanced

Outputs

Output Taps 4Ω , 25V, 70V, 100V Type Speaker Output

Connection Removable 5 Position Captive Screw 5mm Spacing

Wire Size 14 Gauge Max Wire Size

Controls

Indicators

Input Signal Green, 25mV On Threshold Peak Red, -3dB Before Clip

Power Blue



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Electrical

40Hz - 20kHz (±3dB) Frequency Response

THD 0.5% @ 1kHz 78dBV

Signal to Noise

Mounting

Velcro™ Industrial-Grade, Included

Brackets Qty 2, Included

TSD-RMK Optional 1 RU Rack Mount Panel (Supports 4 TSD Units)

Cable Retainer Qty 2, Included

Note: All Current and Watt data is based on AC power **Power Requirements**

consumption using the TSD-PS24V2500mA Power Supply.

 4Ω , $25V = 31\Omega$ Load, $70V = 245\Omega$ Load, $100V = 500\Omega$ Load Load Taps

24VDC 1000mA Voltage

Idle Current 60mA Idle VA Watts 2.8W Average Current 110mA Average VA Watts 6.7W Max Current 240mA Max VA Watts 14W

Dimensions H 1.5" (39mm) x W 4" (101mm) x D 2.75" (70mm)

Weight 6oz, .165kg

Accessories

TSD 24VDC Power Supplies TSD-RMK 1 RU Rack Panel

Safety and Certifications

External Power Supply cUL, CE, RoHS, TUV



Limited Warranty

All products manufactured by Atlas Sound are warranted to the original dealer/installer, industrial or commercial purchaser to be free from defects in material and workmanship and to be in compliance with our published specifications, if any. This warranty shall extend from the date of purchase for a period of three years on all Atlas Sound products, including SOUNDOLIER brand, and ATLAS SOUND brand products except as follows: one year on electronics and control systems; one year on replacement parts; and one year on Musician Series stands and related accessories. Additionally, fuses and lamps carry no warranty. Atlas Sound will solely at its discretion, replace at no charge or repair free of charge defective parts or products when the product has been applied and used in accordance with our published operation and installation instructions. We will not be responsible for defects caused by improper storage, misuse (including failure to provide reasonable and necessary maintenance), accident, abnormal atmospheres, water immersion, lightning discharge, or malfunctions when products have been modified or operated in excess of rated power, altered, serviced or installed in other than a workman like manner. The original sales invoice should be retained as evidence of purchase under the terms of this warranty. All warranty returns must comply with our returns policy set forth below. When products returned to Atlas Sound do not qualify for repair or replacement under our warranty, repairs may be performed at prevailing costs for material and labor unless there is included with the returned product(s) a written request for an estimate of repair costs before any nonwarranty work is performed. In the event of replacement or upon completion of repairs, return shipment will be made with the transportation charges collect.

EXCEPT TO THE EXTENT THAT APPLICABLE LAW PREVENTS THE LIMITATION OF CONSEQUENTIAL DAMAGES FOR PERSONAL INJURY, ATLAS SOUND SHALL NOT BE LIABLE IN TORT OR CONTRACT FOR ANY DIRECT, CONSEQUENTIAL OR INCIDENTAL LOSS OR DAMAGE ARISING OUT OF THE INSTALLATION, USE OR INABILITY TO USE THE PRODUCTS. THE ABOVE WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES INCLUDING BUT NOT LIMITED TO WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

Atlas Sound does not assume, or does it authorize any other person to assume or extend on its behalf, any other warranty, obligation, or liability. This warranty gives you specific legal rights and you may have other rights which vary from state to state.

Service

Should your Atlas TSD require service, please contact the Atlas Sound warranty department at 1-877-689-8055, ext. 1274 to obtain an RA number.

Atlas Sound Tech Support can be reached at 1-800-876-3333.

Visit our website at www.AtlasSound.com to see other Atlas products

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